

22" Liquid Crystal Display Monitor



Before operating the monitor, please read this manual thoroughly. This manual should be retained for future reference.

FCC Class B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device complies with Parts 15 of the FCC Rule. Operation is subject to the following two conditions: (1) this device may not cause harmful interference; and (2) this device must accept any interference received, including interference that may cause undesired operations.

CANADA

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

RECYCLING INFORMATION

Hannspree Inc., cares about environmental protection strategies and in using manufacturing methods and treatments that lend themselves to conservation and recycling devices at the end-of-life.

Our products, whenever possible, contain recyclable materials which can be recycled into new devices. When necessary for operation, other materials may be classified as hazardous or poisonous substances. We strongly encourage you to research the provided information about recycling this device.

For more information, please visit www.Hannspree.com

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SAFETY NOTICE

- 1. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
- 3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibilities of the user to correct such interference.

WARNING:

To prevent fire or shock hazard, do not expose the monitor to rain or moisture. Dangerously high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the monitor on an unstable cart, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you
 are not sure of the type of power supplied to your home, consult your dealer or local power
 company.
- Unplug the unit during a lighting storm or when it will not be used for long period of time. This will protect the monitor from damage due to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor by yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel.
- The wall socket shall be installed near the equipment and shall be easily accessible.



SPECIAL NOTES ON LCD MONITORS

The following symptoms are normal with LCD monitor and do not indicate a problem.

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the Power Switch for hours.
- If the screen suddenly flashes erratically or the backlighting fails, please contact your dealer or service center for repair. Do not attempt to repair the monitor yourself.

Lamp Disposal



LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS. FOR MORE INFORMATION, CONTACT THE ELECTRONIC INDUSTRIES ALLIANCE AT WWW.EIAE.ORG. FOR LAMP SPECIFIC DISPOSAL INFORMATION CHECK TTTTWWW.LAMPRECYCLE.ORG.

PREFACE

Thank you for purchasing a Hannspree Liquid Crystal Display Monitor (LCD Monitor).

Please carefully read this manual in its entirety before setting up, using or operating your Monitor. To ensure the safe and correct installation and operations of the Monitor, it is important that the safety and operation instructions in this manual are followed.

This instruction manual is designed to assist you in setting up and using the Monitor. The information in this manual has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this manual is subject to change without notice.

To the extent allowed by applicable law, Hannspree, Inc. ("Hannspree") shall not be liable for direct, indirect, special, exemplary, incidental or consequential damages arising from any defect or omission in this manual, even if advised of the possibility of such damages in advance.



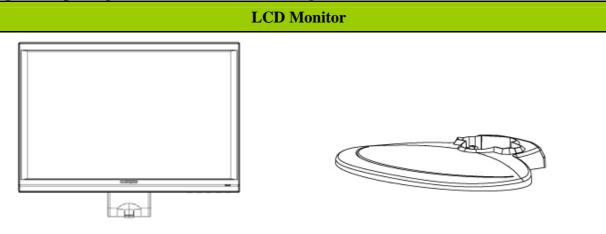
BEFORE OPERATING THE MONITOR

FEATURES

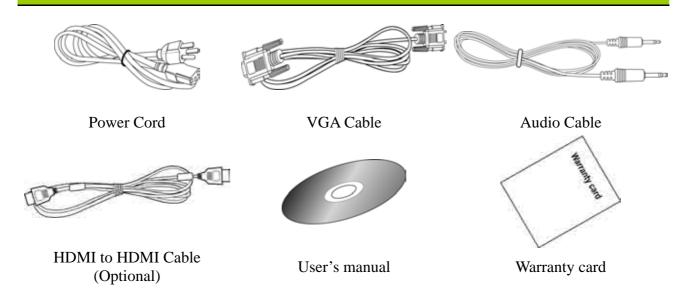
- 22" Wide screen TFT Color LCD Monitor
- Crisp, Clear Display for Windows
- Recommended Resolutions: 1680 X 1050@60Hz
- EPA ENERGY STAR®
- Ergonomic Design
- Space Saving, Compact Case Design

CHECKING THE CONTENTS OF THE PACKAGE

The product package should include the following items:



Cables and User manual



INSTALLATION INSTRUCTIONS

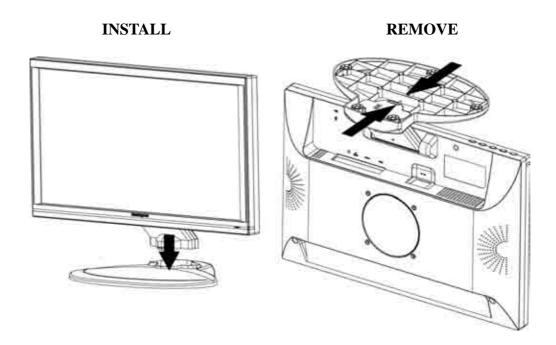


Figure.1. Installing and Removing the Base

INSTALLATION:

- 1. Align the monitor with the opening in the base.
- 2. Note that the longer section of the base points forward.
- 3. Snap the monitor into its base. A clear click sound will affirm that the base is connected correctly.
- 4. Verify that the monitor is securely attached to the base by looking at the bottom of the base and making sure that the clips are fully engaged in the base.

REMOVAL:

- 1. Flip over the monitor so that it is upside down.
- 2. Press the 2 clips on the base that holds the monitor in place.
- 3. Gently press and hold the 2 clips while pulling the base from the monitor until they are unattached.

POWER

POWER SOURCE:

- 1. Make sure that the power cord is the correct type required in your area.
- 2. This LCD monitor has an Internal universal power supply that allows operation with either 100/120V AC or 220/240V AC voltage areas (No user adjustment is required.)
- 3. Connect one end of the AC-power cord to your LCD monitor's AC-input socket, and the other end to the wall-outlet.

MAKING CONNECTIONS

CONNECTING TO A PC

Turn off your computer before performing the procedure below.

- 1. Connect one end of the D-Sub cable to the back of the monitor and connect the other end to the computer's D-Sub port.
- 2. Connect one end of the HDMI cable (Dual input mode optional) to the back of the monitor and connect the other end to the computer's HDMI port.
- 3. Connect the audio cable between the monitor's audio input and the PC's audio output (green port).
- 4. Plug one end of the AC power cord to the LCD monitor's AC input socket, and the other end to the Wall outlet.
- 5. Turn on your monitor and computer.

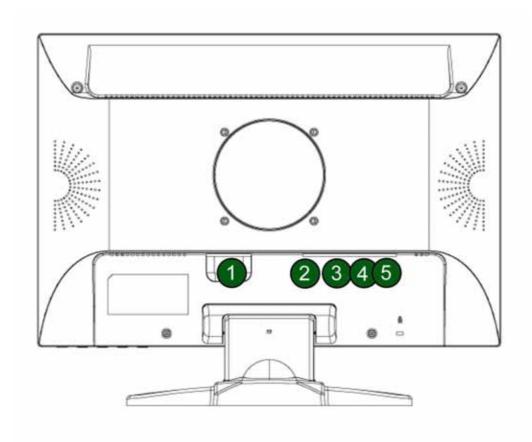


Figure.2. Connecting to a PC

1.	Power AC Input	2.	HDMI Input
3.	VGA Input	4.	Audio Input
5.	Earphone		

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ADJUSTING THE VIEWING ANGLE

- For optimal viewing it is recommended to look at the full face of the monitor, and then adjust the monitor's angle to your own preference.
- Hold the stand so you do not topple the monitor when you change the monitor's angle.
- The monitor's angle is adjustable from -5° to 20°.

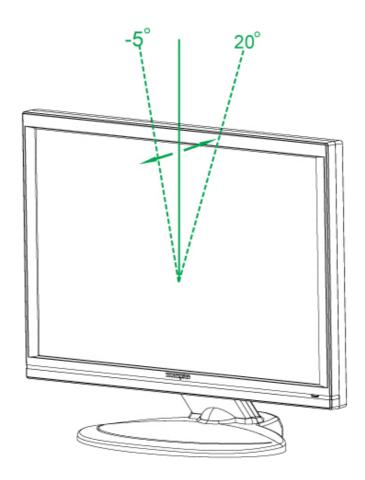


Figure.3. Monitor Angle

NOTES:

- Do not touch the LCD screen when you change the angle. It may cause damage or break the LCD screen.
- Be careful not to place fingers or hands near the hinges when tilting the monitor, otherwise pinching can result.

OPERATING INSTRUCTIONS

GENERAL INSTRUCTIONS

Press the power button to turn the monitor on or off. The other control buttons are located on the front panel of the monitor (See Figure 4). By changing these settings, the picture can be adjusted to your personal preference.

- The power cord should be connected.
- Connect the Signal cable from the monitor to the VGA card.
- Press the power button to turn on the monitor. The power indicator will light up.

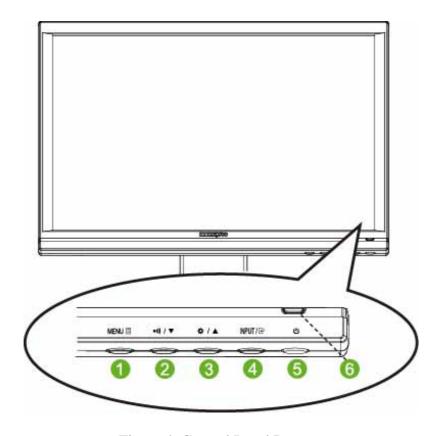


Figure.4. Control Panel Buttons

CONTROL PANEL BUTTONS:

1.	Menu / Return	2.	Volume adjustment button / ▼ [-]
3.	Brightness adjustment button /▲ [+]	4.	INPUT / Enter
5.	Power Button	6.	Power Indicator

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FRONT PANEL CONTROL

• Power Button:

Press this button to switch ON/OFF monitor's power.

• Power Indicator:

Blue — Power On mode. Orange — Power Saving mode.

• MENU / RETURN:

- 1. Turn the OSD menu on/off or return to the previous menu.
- 2. Exit OSD menu when in volume OSD status.

• Adjust ▲ ▼:

- 1. Adjust Brightness and volume when the OSD is off.
- 2. Navigate through adjustment icons when OSD is ON or adjust a function when function is activated.

• INPUT Button:

- 1. Press the input button to select the input signal type. (There are D-SUB, HDMI, YpbPr options available but what port you can actually select depends on your model.)
- 2. The OSD menu is used as "confirmation" function during start-up.
- 3. Press and hold this button more than 3 seconds will start 「Auto Adjust」 function when using VGA input only. (The auto adjustment function is used to optimize the 「horizontal position」, 「vertical position」, 「clock」, and 「phase」.)

NOTES:

- Do not install the monitor in a location near heat sources such as radiators or air dusts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.
- Save the original shipping box and packing materials, as they will come in handy if you ever have to ship your monitor.
- For maximum protection, repackage your monitor as it was originally packed at the factory.
- To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.



HOW TO ADJUST A SETTINGS

BRIGHTNESS/CONTRAST			
BRIGHTNESS	Adjust the brightness value of the display according to your preference. Select 「BRIGHTNESS」 option to adjust the brightness value.		
CONTRAST	Adjust the contrast value of the display according to your preference. Select \lceil CONTRAST $_{\rfloor}$ option to adjust the contrast value.		
X-CONTRAST	Optimal setting for high contrast images or videos. The dark and light areas of the image are automatically detected, and the contrast is enhanced to provide a clearer, sharper image. Also, you may select the 「X-CONTRAST」 option.		
INPUT SETTING			
INPUT SETTING	Select the 「INPUT SETTING」option to change between analog (VGA) or Digital (HDMI) source. Enter the option and select Analog or Digital. [Dual input mode optional]		
AUTO SEARCH	From the Signal Selection menu, select the 「AUTO SEARCH」 option to activate or deactivate the automatic signal search function. [For DVI/ HDMI Input only]		
COLOR SETTING	COLOR SETTING		
WARM NATURE COOL	Adjust the color temperature value of the display according to your preference: WARM /NATURE/ COOL.		
USER	Move the cursor to the User option and select it, To adjust the red, enter the $\lceil R \rfloor$ option and adjust the level. To adjust the green, enter the $\lceil G \rfloor$ option and adjust the level. To adjust the blue, enter the $\lceil B \rfloor$ option and adjust the level.		
IMAGE SETTING			
AUTO ADJUST	The auto adjustment function is used to optimize the \lceil horizontal position \rfloor , \lceil vertical position \rfloor , \lceil clock \rfloor , and \lceil phase \rfloor . [For VGA Input only]		
H-POSITION	Select the 「H-POSITION Joption to shift the screen image to the left or right. Enter the option and adjust the level. [For VGA only]		

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V-POSITION	Select the 「V-POSITION」 option to shift the screen image up or down. Enter the option and adjust the level. [For VGA only]	
CLOCK	Select the 「CLOCK」 option to reduce the vertical flicker of characters on the screen. Enter the option and adjust the level. [For VGA only]	
PHASE	Select the 「PHASE」 option to reduce the horizontal flicker of characters on the screen. Enter the option and adjust the level. [For VGA only]	
SHARPNESS	Select the \lceil SHARPNESS \rfloor option to adjust the sharpness of the display. Set the value from -2 to 2.	
HDMI MODE	Transferring audio-video image by HDMI port would cause edges of the image being cut on the screen; select 「PC Mode」 to display in full screen. Enter the option and select 「VIDEO Mode」 (VIDEO) or 「PC Mode」 (PC). [For HDMI Input only]	
OSD SETTING		
LANGUAGE	Select 「LANGUAGE」 option to change the language of the OSD. Enter the option and select a language. [Reference only, the OSD Language depends on the selected model]	
H-POSITION	Select 「H-POSITION option to adjust the horizontal position of the OSD. Enter the option and adjust the level.	
V-POSITION	Select 「V-POSITION」 option to adjust the vertical position of the OSD. Enter the option and adjust the level.	
TRANSPARENCY	Select 「TRANSPARENCY _option to adjust the transparency of the OSD. Enter the option and adjust the level.	
OSD TIME-OUT	Select \lceil OSD TIME-OUT \rfloor option to set the OSD time out from 10 to 100 seconds. Enter the option and adjust the level.	
OSD COLOR	To choose the color combination of the OSD window, select 「OSD COLOR」option under 「OSD SETTING」menu, choose modes 1/2/3.	
SYSTEM		
AUDIO INPUT	While transferring via the HDMI port, it is recommended to set AUDIO INPUT to HDMI; if no sound is outputted, it is recommended to select AUDIO INPUT as PC, and make sure the	

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	PC audio output cable is connected to monitor's LINE IN (or AUDIO IN) port. [For HDMI Input only]
VOLUME	Select the 「VOLUME」option to change the volume level. Enter the option and adjust the level.
MUTE	Select the 「MUTE」 option to switch the function On or Off.
DDC/CI	Select the 「DDC/CI」 option to switch the function On or Off. [Dual input mode optional]
FACTORY RESET	Select the 「FACTORY RESET」 option to reset to the monitor's default setting. This will erase the current settings. Enter the option and select On or Off.
INFORMATION	Display Horizontal frequency/Vertical frequency/Resolution information.

PLUG AND PLAY

Plug & Play DDC2B Feature

This monitor is equipped with VESA DDC2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities. The DDC2B is a bidirectional data channel based on the I²C protocol. The host can request EDID information over the DDC2B channel.

THIS MONITOR WILL APPEAR TO BE NON-FUNCTIONAL IF THERE IS NO VIDEO INPUT SIGNAL. IN ORDER FOR THIS MONITOR TO OPERATE PROPERLY, THERE MUST BE A VIDEO INPUT SIGNAL.

This monitor meets the Green monitor standards as set by the Video Electronics Standards Association (VESA) and/or the United States Environmental Protection Agency (EPA) and The Swedish Confederation Employees (NUTEK). This feature is designed to conserve electrical energy by reducing power consumption when there is no video-input signal present. When there is no video input signal this monitor, following a time-out period, will automatically switch to power saving mode. This reduces the monitor's internal power supply consumption. After the video input signal is restored, full power is restored and the display is automatically redrawn. The appearance is similar to a "Screen Saver" feature except the display is completely off. The display is restored by pressing a key on the keyboard, or clicking the mouse.



TECHNICAL SUPPORT (FAQ)

Q & A FOR GENERAL PROBLEMS

PROBLEM & QUESTION	POSSIBLE SOLUTION	
Power LED is not on	*Check if the Power Switch is in the ON position	
Fower LED is not on	*Power Cord should be connected	
	*Check if the PC system is Plug & Play compatible	
No Plug & Play	*Check if the Video Card is Plug & Play compatible	
S	*Check if any plug pins on the D-Sub or HDMI connector are bent	
The display is too dark or too bright.	*Adjust the Contrast and Brightness Controls.	
Picture bounces or a wave pattern is present in the picture	*Move electrical devices that may cause electrical interference.	
	*Computer Power Switch should be in the ON position.	
	*Computer Video Card should be snugly seated in its slot	
The power LED is ON	*Make sure monitor's video cable is properly connected to the computer.	
(orange) but there's no video or no picture.	*Inspect monitor's video cable and make sure none of the pins are bent.	
	*Make sure computer is operational by hitting the CAPS LOCK key on the keyboard while observing the CAPS LOCK LED. The LED should either turn ON or OFF after hitting the CAPS LOCK key.	
Missing one of the primary colors (RED, GREEN, or BLUE)	*Inspect the monitor's video cable and make sure that none of the pins are bent.	
Screen image is not centered or sized properly.	* Adjust pixel frequency CLOCK and PHASE or press hot-key (INPUT Button)	
Horizontal or vertical disturbances on the screen	*Use win 95/98/2000/NT/ME/XP shutdown mode Adjust CLOCK and PHASE or perform hot- key (INPUT Button).	
The screen resolution needs to be adjusted	*Use win 2000/ME/XP Right click anywhere on desktop and select Properties > Settings > Screen Resolution . Use the silder to adjust the reslution and click Apply	

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No sound is outputted from monitor's built-in speaker

- *Make sure PC audio output cable is connected to screen's LINE IN port (or AUDIO IN port).
- *Make sure the sound volume adjustment can be clearly identified.
- *Make sure the **System** > **Silence** option in the monitor menu is
- *While transferring via HDMI port but no sound is outputted, it is recommended to select AUDIO INPUT as a PC option, and make sure PC audio output cable is connected to monitor's LINE IN port(or AUDIO IN port). [For HDMI Input only]

ERROR MESSAGE & POSSIBLE SOLUTIONS

CABLE NOT CONNECTED:

- 1. Check that the signal-cable is properly connected, if the connector is loose, tighten the connector's screws.
- 2. Check the signal-cable's connection pins for damage.

INPUT NOT SUPPORT:

Your computer has been set to unsuitable display mode, set the computer to display mode given in the following table.

FACTORY PRESET TIMING TABLE:

MODE	RESOLUTION	HORIZONTAL FREQUENCY (KHz)	VERTICAL FREQUENCY (Hz)
1	640x350@70Hz	31.469	70.087
2	640x400@70Hz	31.469	70.087
3	720x400@70Hz	31.469	70.087
4	640x480@60Hz	31.469	59.94
5	640x480@67Hz	35	66.667
6	640x480@72Hz	37.861	72.809
7	640x480@75Hz	37.5	75
8	800x600@56Hz	35.156	56.25
9	800x600@60Hz	37.879	60.317
10	800x600@72Hz	48.077	72.188
11	800x600@75Hz	46.875	75
12	832x624@74.6Hz	49.725	74.5
13	1024x768@60Hz	48.363	60.004
14	1024x768@70Hz	56.476	70.069
15	1024x768@75Hz	60.023	75.029
16	1152x864@75Hz	67.5	75
17	1152x870@75Hz	68.681	75.062
18	1280x720@60Hz	45	60
19	1280x768@60Hz	47.396	59.995
20	1280x768@75Hz	60.289	74.893
21	1280x960@60Hz	60	60
22	1280x960@75Hz	74.592	74.443
23	1280x1024@60Hz	63.981	60.02
24	1280x1024@75Hz	79.976	75.025

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25	1440x900@60Hz	55.935	59.887
26	1440x900@75Hz	70.635	74.984
27	1680x1050@60Hz	65.29	59.954
28	720x480i@60Hz	15.734	59.94
29	720x480p@60Hz	31.469	59.94
30	720x576i@50Hz	15.625	50
31	720x576p@50Hz	31.25	50
32	1280x720p@50Hz	37.5	50
33	1280x720p@60Hz	45	60
34	1920x1080i@60Hz	33.75	60
35	1920x1080i@50Hz	28.125	50



APPENDIX

SPECIFICATIONS

	Driving system	TFT Color LCD	
LCD Panel	Size	22"	
	Pixel pitch	0.282mm(H) x 0.282mm(V)	
Video	H-Frequency	30KHz – 80KHz	
Video	V-Frequency	50Hz-75Hz	
Display Colors		16.72 M Colors	
Max. Resolution		1680 x 1050 @60Hz	
Plug & Play		VESA DDC2B TM	
	ON Mode	≤55W	
EPA ENERGY STAR®	Power Saving Mode	≤2W	
	OFF Mode	≤1W	
Audio output		Rated Power 1 W rms (Per channel)	
Input Terminal		D-Sub HDMI (support DVI-D signal)	
Maximum Screen Size		Hor.: 473.76mm Ver.: 296.16mm	
Power Source		100~240VAC±10%, 50±3Hz, 60±3Hz	
Environmental Considerations		Operating Temp: 0° to 40°C Storage Temp: -20° to 60°C Operating Humidity: 20% to 90%	
Dimensions		518(W)×412(H)×230(D) mm 20.3"(W)×16.2"(H)×9.0"(D)	
Weight (NW)		5.8kg (12.77 lb)	

The above specification is subject to actual panel specification and is subject to change without prior notice.

NOTES:

Maximum Resolution is dependant on the support of your computer system and video card. Please see http://www.hannspree.com for more information.

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Service website:

http://jpservice.hannspree.net